



Review Paper

The nexus of immigration regulation and health governance: a scoping review of the extent to which right to access healthcare by migrants, refugees and asylum seekers was upheld in the United Kingdom during COVID-19



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ABSTRACT

Objectives: Complementing the well-established evidence base on health inequalities experienced by migrants, refugees and asylum seekers in the UK; we examined the extent to which their right to equal non-discriminatory access to health services (promotive, preventive, curative) was upheld during the COVID-19 pandemic.

Study design: Arksey and O'Malley's scoping review framework.

Methods: A comprehensive search was conducted on Medline, PubMed, and CINAHL using detailed MESH terms, for literature published between 01 January 2020 and 01 January 2024. The process was supported by a ten-page Google search and hand searching of reference lists. 42 records meeting the inclusion criteria were charted, coded inductively and analysed thematically in an integrated team-based approach.

Results: Dissonance between immigration regulation and health governance is illustrated in four themes: *Health systems leveraged to (re)enforce the hostile environment*; *Dissonance between health rights on paper and in practice*; *Structural failures to overcome communication and digital exclusion*; and *COVID-19 vaccine (in)equity exacerbated fear, mistrust and exclusion*. Migrants, refugees and asylum seekers encountered substantial individual, structural and policy-level barriers to accessing healthcare in the UK during COVID-19. Insecure immigration status, institutional mistrust, data-sharing and charging fears, communication challenges and digital exclusion impacted heavily on their ability to access healthcare in an equitable non-discriminatory manner.

Conclusions: An inclusive and innovative health equity and rights-based responses reaching all migrants, refugees and asylum seekers are warranted if the National Health Service is to live up to its promise of 'leaving no one behind' in post-pandemic and future responses.

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Background

The United Kingdom (UK), like many European countries, has a long history of contentious immigration regulation, refugee and asylum processes and policies, heavily underpinned by

securitisation agendas. In 2009, the estimated population of precarious migrants ranged between 417,000 and 863,000, including between 44,000 and 144,000 UK-born children.¹ Over a decade later, in 2021, asylum applications were at their highest level since 2003 excluding dependents (48,540), and were 63% higher than in

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2020 (29,815).² As of November 2022, there were 231,597 refugees, 127,421 people with pending asylum cases and 5,483 stateless persons living in the UK.³ In 2022, 72,027 asylum applications were received, double that of 2019.³ Entries to immigration detention have also increased threefold since 2020.³ At the end of March 2023 there were over 47,000 asylum seekers living in hotels across the UK.⁴ The exact size of the UKs undocumented migrant population is unknown, as is the total number entering the UK by irregular means.^{5,6} Whilst there are no official statistics on the number of people with no recourse to public funds (NRPf) in the UK, it is estimated that approximately 1.6 million people held visas containing NRPf conditions at the end of 2021.^{7–9}

Various “hostile environment” immigration policies were implemented by the UK government before and during the COVID-19 pandemic,¹⁰ which included a broad range of legislative and administrative measures intending to heighten precariousness of those without full rights to remain in jurisdiction.^{11–15} A key example was the charging of migrants for healthcare and the reporting of debt to the Home Office.¹² Other legislative shifts which targeted migrants, refugees and asylum seekers, particularly the homeless, included the late 2020 revisions to the Immigration Rules which made rough sleeping a ground for refusal or cancellation of permission to be in the UK.^{16,17} Immigration detainees were also exposed to unsafe retention and release arrangements with subsequent negative impacts on linkage to health and social care and rough sleeping.^{17,18}

Whilst migrants generally have good health on arrival to a host country (known as “the healthy migrant effect”),^{19,20} this is more relevant to planned migration and is often not the case for those from refugee backgrounds or coming from precarious situations, where conditions in their home country and transit experiences affect their health. Many “face a ‘triple burden’ of infectious diseases, mental health disorders and non-communicable diseases” due to adverse experiences before, during transit and after migration.^{21,22} These heightened risks, exposure to disease and other harms, and consequent poorer health outcomes were amplified during the COVID-19 pandemic.^{23–26}

A broad range of equitable public health responses targeting all hidden, marginalised and vulnerable groups were promulgated by United Nations (UN) agencies²⁷ during COVID-19 which mandated inclusive emergency responses and access to healthcare (including testing) in a non-discriminatory manner.^{28–30} In the UK, despite government recognition of the unique health and contextual vulnerabilities of migrant, refugee or asylum seeking groups^{31,32} and their assurance to include them in COVID-19 public health responses,³³ implemented health policy and public health measures did not necessarily reach them.^{13,18,34,23–26,31,35–39} This was especially the case for the undocumented, those with precarious immigration status, and stateless persons; as well as those living in

congested and unsanitary home, work and immigration detention environments.

Complementing the well-established evidence base on health inequalities experienced by migrants, refugees and asylum seekers in the UK during the COVID-19 pandemic, we conducted a scoping review which explicitly focused on examining the extent to which their right to equal non-discriminatory access to health services (promotive, preventive, curative) was upheld. The review is intended to collate and describe the extant knowledge base in order to better understand their navigation of health services during the pandemic, so that evidence-based and inclusive public health measures and equitable health systems can be operationalised which fulfil rights-based obligations regarding the right to health and equal access of health services, and respond to their unique (often complex) health needs.

Methods

A scoping review approach was adopted to map extant literature across disciplines with relevance to time (COVID-19) and location (UK); examine the broad area of health service equity of access and uptake by migrants, refugees or asylum seekers; and identify gaps in the knowledge and areas for further investigation.^{40–44} The Arksey and O’Malley⁴⁰ six-step iterative framework for scoping review and methodological guidelines for scoping reviews were adhered to.^{41–44} Recognising the importance of including multi-disciplinary team expertise into the scoping process^{42,43} we customised our scoping review by incorporating an integrated team-based approach throughout.⁴⁵ Our team consisted of clinicians (MT, MDA), and academics with expertise in public health and health inequalities (VH, MCVH), health psychology (RM), infectious diseases and tropical health (MT) and human rights law (MCVH).

The review was undertaken in compliance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, although no formal protocol was prepared or registered.⁴⁶ The research question was: “What is known about the experiences of migrants, refugees or asylum seekers in accessing health services in the UK during COVID-19?” A comprehensive search was conducted in late 2023 on MedLine, PubMed, and CINAHL, with MESH terms combined using Boolean operators, for the period 01 January 2020 to 01 January 2024. The search was confined to the English language. A final updated search was conducted on 03 January 2024. The process was supported by a ten-page Google search and hand searching of reference lists to ensure no relevant records were missed. See Table 1.

No restrictions were imposed on study design because the rapid evolution of the COVID-19 health landscape meant that important information referring to aspects of healthcare access of migrants, refugees or asylum seekers were often embedded in reviews,

Table 1
Population, Concept and Context Framework.

Population, Concept and Context Framework	#	Searches
Migrant, refugee and asylum seeker populations of any age or gender, professionals working with migrants, refugees and asylum seekers in the UK Population	1	migrant* OR refugee* OR immigrant* OR “undocumented migrants” OR “undocumented migrant” OR “asylum seeker” OR emigrant* OR “migrant population” OR “undocumented immigrants” OR “undocumented workers” OR “undocumented worker” OR “unauthorized immigrant”
Experience relating to migrant, refugee and asylum seeker experiences and barriers to access to healthcare during COVID-19 Concept	2	“Health care access” OR “Health care utilisation” OR “Health services accessibility” OR “Healthcare availability” OR “Healthcare barriers” OR “Healthcare disparities” OR “NHS access” OR “GP registration” OR “NHS entitlement” OR “Health equity” OR “Health inequalities”
Context of COVID-19 relevant to migrants, refugees and asylum seekers in the UK Context	3	COVID-19 OR COVID19 OR “Covid pandemic” OR “COVID 19” OR “SARS-CoV-2 Infection” OR “SARS CoV” OR Coronavirus OR Pandemic
Combining searches:	4	S1 AND S2 AND S3

Table 2
Inclusion and exclusion criteria.

Criteria	Inclusion Criteria	Exclusion Criteria
Focus	Studies and reports reporting on the experiences of and access to healthcare of migrants, refugees and asylum seekers during COVID-19.	Studies and reports on the general impact of COVID-19 on the general population. Studies and reports referring to migrant, refugee and asylum seeker health but not referring to access to healthcare.
Exposure of Interest Date	COVID-19 Studies and reports conducted from 01 January 2020–01 January 2024.	Studies and reports not mentioning COVID-19. Studies and reports conducted outside the selected COVID-19 timeline (01 January 2020–01 January 2024).
Geographical location Participants	UK Migrants, refugees and asylum seekers	Exclusion of the UK or lack of focus on the UK. Not referring to migrants, refugees and asylum seekers. Referring to immigrants defined as British people who have moved from one UK location to another UK location during their lifetime.
Reported Outcomes	Legal, structural and individual barriers to access of health services during COVID-19 Experiences of inequitable access to health services Experiences of exclusion from primary care, public health, preventative and curative responses to COVID-19	Not referring to any aspect of access to health services by migrants, refugees and asylum seekers in the UK during COVID-19.

reports, editorials, and grey literature, as well as qualitative, quantitative and mixed-method primary research studies. We excluded mass media reports. We included promotive services (e.g., public health information), preventive services (e.g., vaccination or screening) and treatment services (e.g., general practitioner (GP) appointments, hospital attendances). Exclusion criteria centred on records where reference to migrant, refugee or asylum seeker-specific results or their access to healthcare during COVID-19 could not be extracted. See [Table 2](#).

Records were managed using Rayyan, with duplicates removed. The title and abstract of retrieved records were screened independently by authors one to four, and six. Following the removal of duplicates, all relevant records were procured for review of the full-text version. A second screen of the full text of each record was conducted by the team (authors one to four, and six) with records excluded if not meeting the eligibility criteria. Reference lists of included records, and of reviews were manually searched by authors one, two and six to identify any additional records. Author five conducted an overall final cross-check for inclusion. The process was further supported by an expert non-governmental steering committee who were requested to identify any missing records of interest. See [Fig. 1](#).

Authors one and two conducted a trial charting exercise of several records as advised by Daudt et al.⁴² followed by a team consultation to ensure consistency with the research question and the general aim of the scoping review. The full data set was subsequently charted and analysed using line-by-line inductive coding as per Levac et al.⁴³ in consultation with all authors. See [Supplemental Table \[online\]](#).

Results

The final data set consisted of 42 records (see [Table 3](#)), reflective of a broad range of research approaches; editorials and commentary journal papers ($n = 11$);^{12,13,18,47–54} systematic and scoping review journal papers ($n = 7$);^{23,24,26,35,55–57} rapid evidence review reports ($n = 2$);^{25,58} mixed method reports ($n = 8$);^{9,15,38,59–63} mixed method journal papers ($n = 2$);^{64,65} qualitative journal papers ($n = 9$);^{66–74} qualitative reports ($n = 2$);^{75,76} and a quantitative journal paper ($n = 1$).⁷⁷ Reports were clustered in the earlier years of the pandemic (2020–2021) with one published in 2023. Publication of empirical journal papers, particularly qualitative studies increased in the years 2021 and 2023. Geographies of included

records were either UK-focused or concentrated in England (mostly London, North West, South West).

Of key importance for this human rights-based assessment is that two distinct governance structures (namely health and immigration regulation) clashed and the consequent hostile environment enforced by immigration regulation contributed to substantive health and social vulnerability, moral injury for health clinicians and substantive human (and health) rights infringement.

Health systems leveraged to (re)enforce the hostile environment

Many records referred to the impact of the hostile environment and policies such as “The immigration health surcharge” which exacerbated fear of surveillance and severely impacted intentions and ability to access health services; many also referred to the potential for politicisation of healthcare professionals within larger political and legal systems governing healthcare access and the rights of migrants.^{12,18,23,47,48,53,54,60–62,65,69,70} The hostile environment policy transformed healthcare workers into ‘*assessors and enforcers of entitlement*’, often without sufficient training and interpretation capacity, and placed healthcare workers in very challenging positions.^{12,18}

The lack of clear communication from the UK government regarding healthcare entitlements and data sharing between the National Health Service (NHS) and the Home Office led to mistrust, deterrence and avoidance in the use of healthcare services.⁶⁵ Confusion around entitlements, fears around upfront charging and potential NHS debts, and data sharing for immigration purposes, denial of healthcare, and delays in accessing healthcare were reported, particularly among those with precarious immigration status or undocumented.^{47,48,50,53,56,59,60,62,64,65,68} Individuals with

insecure immigration status and the undocumented were generally not registered with a GP due to their assumption that names would be forwarded to the Home Office, and were also excluded from NHS services during COVID-19.^{53,69} Migrants were reported to be less likely to use the NHS Test-and-Trace apps due to fears of data sharing with immigration authorities.⁶⁶

Whilst COVID-19 treatment was exempted from hospital charging, some asylum seekers and undocumented migrants avoided hospital treatment due to concerns around being charged if their symptoms/illness was not a consequence of COVID-19.^{23,65} There were also fears and suspicion around the quality of

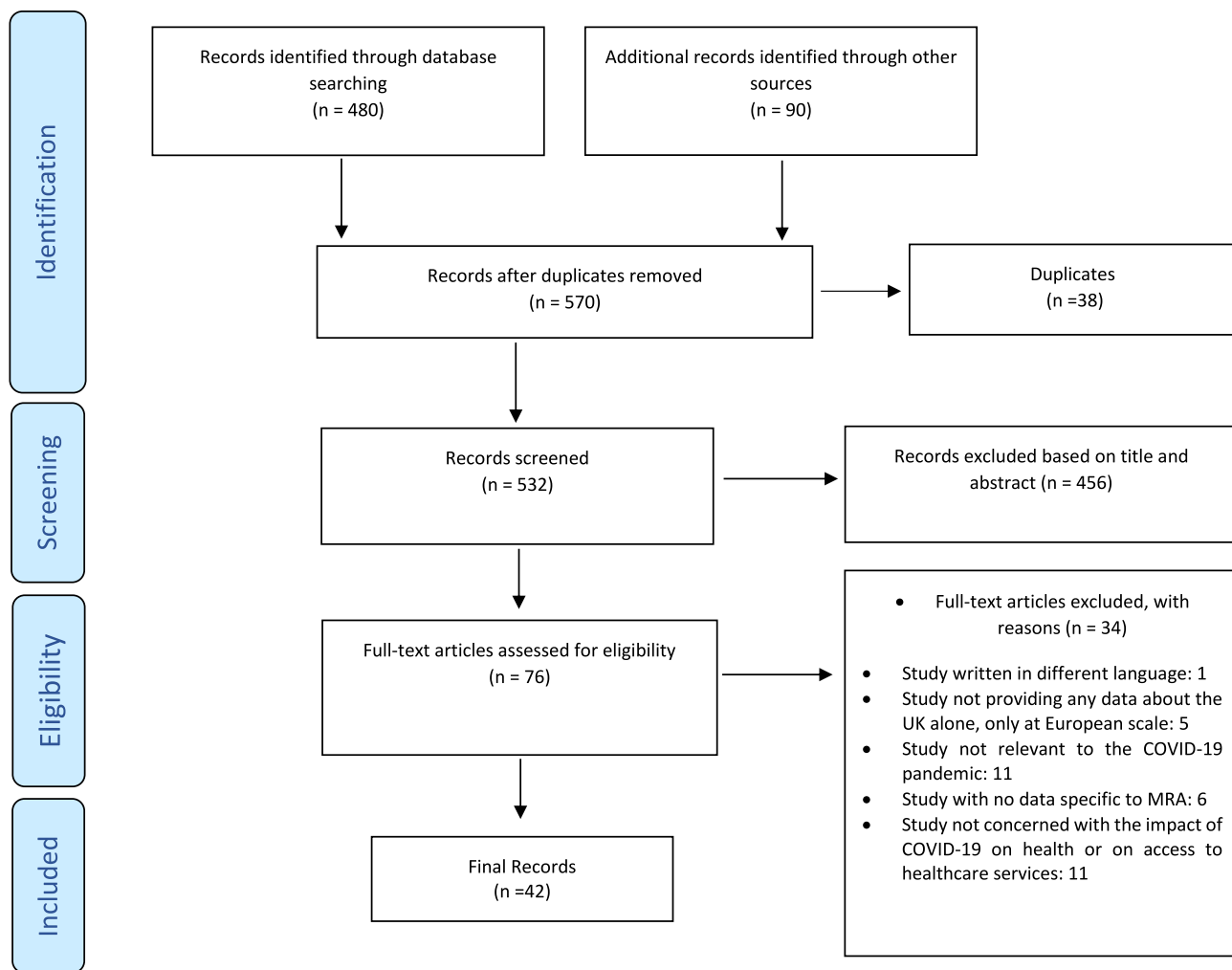


Fig. 1. Flowchart.

healthcare, as for example, asylum seekers were concerned they would not be given priority access to vital medical interventions such as ventilators in the event of serious COVID-19 infection.⁵⁹ While refugees were entitled to free healthcare, many remained apprehensive due to the hostile policies and treatment faced by irregular migrants.^{62,67}

Dissonance between health rights on paper and in practice

Substantial administrative barriers to accessing healthcare during COVID-19 underpinned by the various hostile immigration policies and COVID-19 restrictive measures were documented, particularly regarding GP registration due to requirements for identification and

Table 3
Type of record and publication years.

Type of Record	Year of Publication				Total
	2020	2021	2022	2023	
<i>Journal items:</i>					
Editorials and Commentary journal papers	2	4	4	1	11
Systematic and scoping review peer reviewed journal papers	1	4	1	1	7
Quantitative peer reviewed journal paper	0	0	1	0	1
Mixed method peer reviewed journal papers	0	0	2	0	2
Qualitative peer reviewed journal papers	0	4	2	3	9
<i>Sub-total</i>	3	12	10	5	20
<i>Reports:</i>					
Qualitative Report	1	0	0	1	2
Rapid evidence review Report	1	1	0	0	2
Mixed Method Reports	6	2	0	0	8
<i>Sub-total</i>	8	3	0	1	12
Total	11	15	10	6	42

proof of address.^{18,23,50,54,55,61,63,65,70–72} One study reported that less than 24% of GPs were willing to register a patient without requiring identification, proof of address, or proof of legal immigrant status during COVID-19 despite NHS and Royal College of General Practitioner guidance to the contrary.¹⁸ Asylum seekers who stayed in hotels reported difficulty getting registered.⁶⁵

With the shift to remote consultations, many GPs also announced that they were not registering new patients, furthering exacerbating efforts to seek medical care.^{63–65} Inability to register with GP was observed to result in delayed access, disrupted continuity of care, and delayed or interrupted access to medication.⁶⁵

Help-seeking was further compromised by lack of trust in health systems,⁵⁸ impaired literacy and (at times) inadequate healthcare providers' sensitivity and skill in engaging with cultural differences and communication challenges,^{55,72} and disruption of trusted community health services during COVID-19.^{49,67} Zhang et al.⁷⁷ reported the reduction in primary consultation rates of migrants was greatest during COVID-19 in those whose first language was not English; children, and in certain ethnic groups. Another study reported that primary care receptionists, who frequently attempted to assist with language barriers, became a practical source of support for migrants.⁷² Continuity of care was also particularly precarious for migrants released from immigration detention facilities, due to lack of safe release arrangements with health, social and housing services.¹⁸

Structural failures to overcome communication and digital exclusion

Official governmental guidance and public health risk communications were perceived to have failed to fully consider the lived realities of migrants, refugees and asylum seekers navigation of healthcare systems during COVID-19.^{23,24,55,61,67,70–72} The “one-size-fits-all” approach overlooked predictable cultural, language and structural barriers to accessing healthcare.⁷² Many studies described misinformation originating both in countries of origin and through local community social media dynamics. Issues of literacy and linguistic challenges, concerns around misdiagnosis due to communication challenges, preference for face-to-face medical consultation, and how the shift to remote consultations constituted a further (and at times indirect) form of discrimination were also highlighted and related to heightened reluctance to seek medical care (and vaccines).^{18,55,58,59,62,71,72,76}

Whilst the health system shifted to use of health technologies during COVID-19, individuals without access to the internet were telephonically and digitally excluded.^{47–49,75} Profound challenges were encountered (particularly among undocumented or precarious migrants) as a consequence of phone-based ‘remote by default consultations’ due to low digital literacy and digital exclusion (insufficient phone credit or limited access to Wi-fi in accommodation, especially during homeschooling of children, and library/public space closures; inability to download Apps due to lack of valid identity documents; and lack of having access to laptops, printers and scanners).^{18,35,53,47,49,59,61,63,65,67,71,72,75}

These intersectional challenges were observed to lead to avoidance of medical care and only seeking healthcare at pharmacies or emergency departments.⁷⁵ Social media (Facebook pages) was used with some success by migrant organisations to disseminate information, coordinate resources and monitor the needs of irregular and undocumented migrants.^{47,49} Mobile and pop-up interventions (walk-in vaccination centres, mobile vaccination units, Nightingale [pop-up] hospitals) also helped reach and engage with migrant communities and alleviate hospital pressures.⁴⁷

Inadequate access to essential services and support networks along with digital isolation however emerged as substantial determinants of poor mental health outcomes.^{26,60,67,72,75,76}

COVID-19 vaccine (in)equity exacerbated fear, mistrust and exclusion

Barriers that affected routine healthcare access impacted on health promotion and prevention initiatives and consequently on vaccination uptake and completion rates.^{52,55,69,70,72–74} Studies referred to government mistrust and misinformation leading to vaccine hesitancy, vaccine safety and effectiveness concerns, discontinuation or digitalisation of usual points of contact, such as trusted community or migrant organisations, charities and walk-in centres; lack of awareness about immigration status exemptions at vaccination centres, fears for unequal distribution of vaccines (i.e., they would be last), and vaccination charges.^{58,61,62,69,70,72}

Facilitators to vaccine access included accessibility, social network influences, respect for authority and belief in the medical research process, opportunity to discuss with a GP or other trusted source, and desire to protect self and others.⁷³ One study reporting on primary care staff perceptions highlighted the lack of training and guidance knowledge among staff around migrant vaccination backgrounds, incomplete or unclear vaccination records, and frequent use of ad hoc, fragmented and opportunistic delivery models.⁷⁴

Discussion

The scoping review represents a first step towards mapping literature on the extent to which the rights of migrants, refugees and asylum seekers to access equal, non-discriminatory healthcare services were upheld by the UK government during and beyond COVID-19. It collates and provides contextual health system understanding as to why these groups and communities were disproportionately impacted by COVID-19 infection, illness and death, beyond the well-established evidence base on social, occupational and housing disadvantage, chronic ill-health, cultural marginalisation and environmental determinants of ill-health.^{23–26} The review illustrates how dissonance between immigration regulation and health governance amplified a host of individual, structural and policy levels barriers experienced by migrants, refugees and asylum seekers in accessing and receiving non-discriminatory equitable healthcare in the UK. Human rights infringement occurred despite the plethora of UN promulgations reminding States of their obligation and mandate not to exclude or deny substantive equality health rights during COVID-19.

Despite best efforts by trusted non-governmental organisations to reach migrant and refugee (including those seeking asylum or in immigration detention) communities, COVID-19 amplified the existing grave structural inequalities in the UK. The underpinning common denominators related to institutional mistrust, fears around charging, surveillance and data sharing with the Home Office, linguistic challenges and digital exclusion impacting heavily on the ability to access health services, including COVID-19 vaccination and follow-up, in an equitable manner during the pandemic.^{14,25,35,47–49,53,58,59,61–63,74,75,78–80} Various records recognise dimensions of additional vulnerability during the pandemic relating to gender, age (particularly children), precarious immigration status, being stateless and/or undocumented, immigration detainees with unsafe release arrangements and those in transient or unstable housing.^{9,13,18,38,50,52,53,57,64}

World Refugee Day on 20th June 2023 marked the continued imperative to support health system access and healthcare supports for migrants, refugees and asylum seekers. Right to health is a universal fundamental human right. Whilst, the right to health is not to be interpreted as a right to be healthy, principles of non-discrimination and equal treatment (e.g., equality of access to healthcare, prohibition of indirect discrimination by inappropriate

health resource allocation) are central. States are required under international law to; “*inter alia, refrain from denying or limiting equal access for all persons, including prisoners or detainees, minorities, asylum seekers and illegal immigrants, to preventive, curative and palliative health services; abstain from enforcing discriminatory practices as a State policy ...*”.⁸¹

Whilst our scoping review was confined to extant literature regarding the UK jurisdiction, findings resonate with literature from elsewhere, including where hostile immigration regulation agendas directly and indirectly interfered with and compromised public health agendas during COVID-19 state disaster measures. The broad information base also collectively illustrates the continued impact of the ‘*sedentary bias*’ of national health systems⁴⁷ and the myriad of lived realities and challenges to equitable non-discriminatory access. Although not a deliberate part of the hostile environment, GP registration was already challenging pre-pandemic for these groups.⁸² The continued overlap of health, digital and social exclusion in the UK during COVID-19 is furthermore evident.^{83–85} Undocumented migrants or those with limited leave to remain, individuals with NRPf and those living in detention centres or temporary (asylum or work) accommodation were especially digitally excluded in their attempts to register and seek healthcare.

The disproportionate impact of COVID-19 on the physical and mental health of ethnic minorities in the UK is (by now) well established.^{31–33,80,86,87} Little is known about the long term public health and societal consequences (or scale of the problem) of unequal access to healthcare experienced by migrants, refugees and asylum seekers during COVID-19, even though national and local cross-sectional alliances of professional bodies, Doctors of the World, politicians, healthcare workers, representative/advocacy organisations and communities against migrant health charges attempted to counter the hostile narrative and support access to care (including preventive initiatives).^{34,88} Concerted resistance to charging policies in the UK were best exemplified by the ‘*Patients Not Passports*’ and ‘*Vaccines for All*’ campaigns, along with a broad range of grassroots, migrant and healthcare worker-led networks operating to support those affected via innovative, often mobile outreach routes.⁴⁷ Whilst Public Health England explicitly stated that COVID-19 vaccines were free of charge and administered without immigration checks,⁸⁹ many ethnic and minority groups were not reached by COVID-19 vaccination rounds or were hesitant.^{90–94} Despite vaccination entry points acting as a potential medium to encourage health seeking, access to care and engage with communities, we speculate that there is a real risk that this adverse experience will result in a permanent shift in obstructing

migrant, refugee and asylum seeker health seeking behaviour post pandemic.

Ultimately, the public health and societal consequences of not taking a rights-based approach to universal healthcare and system governance in the UK are potentially grave. It is hoped the findings of this unique human rights-based review will be used to inform future approaches for migrants, refugees and asylum seekers, with relevance even in non-pandemic times regarding non-discriminatory equitable access to healthcare. Notwithstanding the substantive morbidity and potential mortality impacts on these marginalised groups and their families, we also speculate there are direct potential impacts on health system functioning and capacity. Keeping individuals healthier through better access to healthcare and vaccination early on will have downstream impacts on the uptake of emergency services and treatment of people in extremis. Inclusive and innovative health equity and rights-based responses are therefore urgent if the NHS is to live up to its promise of universal health coverage ‘*leaving no one behind*’ in post-pandemic and future responses.

Finally, routine data are lacking. Where mortality data are recorded, the UK (as well as other European countries) reported significantly higher all-cause mortality in migrants in 2020 compared with both the host population and migrants in previous years.⁵⁸ There is no exact data on the numbers of migrants, refugees and asylum seekers, including those with NRPf, living in the UK nor has there been any concerted effort or health surveillance system to track and follow up on their disaggregated health outcomes and vaccine coverage. These issues need to be addressed, see [Table 4](#).

Strengths and limitations

Whilst confined to one jurisdiction, this is the first human rights-based assessment of the extent to which the right of migrants, refugees and asylum seekers to access non-discriminatory equitable healthcare during COVID-19 was upheld (as was promulgated by various United Nations agencies, and further supported by international human rights treaties and normative frameworks for right to health; *respect, protect and fulfil*).

Strengths of the review centre on the comprehensive search undertaken by a multi-disciplinary team-based approach and further supported by an expert non-governmental steering committee.⁴⁵ Limitations centre on the relative lack of information from Northern Ireland and Wales, and heterogeneity of records making it difficult to generalise. Some records included the UK amongst other countries, and others were small-scale and micro-level.

Table 4

Solutions to support optimal and equitable access to healthcare.

- Develop the scope of public health surveillance in order to enhance understanding of migrants, refugees and asylum seekers' access to healthcare, mortality, morbidity and vaccine uptake.
- Invest and strengthen inter-agency collaboration and partnerships between government and non-governmental organisations who engage with and support migrants, refugees and asylum seekers and their communities, and their health so that all barriers to healthcare access (language, legal, administrative, financial, physical) are removed.
- Prioritise migrants, refugees and asylum seekers in future national response plans and develop culturally sensitive, tailored and targeted public health strategies cognisant of the unique needs and challenges of individual migrants, refugees and asylum seekers and their communities so that clear public health messaging reaches them, reduces misinformation and vaccination barriers are minimised.
- Ensure that broad based and inclusive communications with tailored and targeted health information is provided in primary care, co-produced with migrant, refugee and asylum seeker and their communities in appropriate languages, and supported by delivery via trusted community messengers (civil society, non-governmental organisations, charities, faith based organisations, food banks etc) and employers, and health innovations (text templates, You Tube, social media) where possible.
- Given the shift to remote consultations, ensure that primary care remains accessible to migrant, refugee and asylum seeker communities, ideally with culturally sensitive approaches available (including face-to-face consultations, assistance with internet access, interpretation and translation, and visual health literacy tools and media).
- Ensure that culturally sensitive and trauma informed mental health screening, interventions, treatment, care and support are developed with migrant, refugee and asylum seeker communities in mind and provided to scale according to geographic need.
- Support further research particularly community-academic participatory studies to better document and understand the consequences of misinformation and low COVID-19 vaccine uptake, and the impact of charging on healthcare and health outcomes among migrant, refugee and asylum seeker communities.

Given the central focus on examination of migrants, refugees and asylum seekers' experience of access to health services during COVID-19 and the heterogenous and diverse nature of records retrieved, it was beyond our scope to conduct a critical assessment of quality or compare numerical and qualitative analysis. They are a diverse group with differing experiences, and some sub-groups may have particular challenges, e.g., due to sexual orientation or gender identity, which could compound issues and we have not considered these here.

Author statements

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Ethical approval

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Competing interests

None to declare.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.puhe.2024.04.012>.

References

- Gordon I, Scanlon K, Travers T, Whitehead C. *Economic impact on the London and UK economy of an earned regularisation of irregular migrants to the UK*. 2009. https://web.archive.org/web/20150915212806/http://www.london.gov.uk/mayor/economic_unit/docs/irregular-migrants-report.pdf. [Accessed 17 December 2023].
- Refugee Council. *Asylum statistics annual trends*. 2022. www.refugeecouncil.org.uk/wp-content/uploads/2022/03/Asylum-Statistics-Annual-Trends-Feb-2022.pdf. [Accessed 12 December 2023].
- United Nations High Commissioner for Refugees (UNHCR). *Asylum in the UK*. 2023. www.unhcr.org/uk/asylum-uk. [Accessed 17 December 2023].
- The Home Office. *Accommodation sites factsheet - April 2023, Accommodation sites factsheet - April 2023 - home Office in the media*. 2023 (blog.gov.uk). [Accessed 17 December 2023].
- The Home Office. *Official statistics irregular migration to the UK, year ending September 2022*. 2022. www.gov.uk/government/statistics/irregular-migration-to-the-uk-year-ending-september-2022. [Accessed 17 December 2023]. 2022.
- Jolly A, Thomas S, Stanyer J. *London's children and young people who are not British citizens: a profile*. 2018. www.london.gov.uk/sites/default/files/final_londons_children_and_young_people_who_are_not_british_citizens.pdf. [Accessed 17 December 2023].
- Cuibus M, Fernández-Reino M. Deprivation and the no recourse to public funds (NRPF) condition. *Migrat Observ* 2023. University of Oxford, <https://migrationobservatory.ox.ac.uk/resources/briefings/deprivation-and-the-no-recourse-to-public-funds-nrpf-condition/#:%7E:text=Eligible%20individuals%20must%20be%20in,meet%20other%20essential%20living%20needs>. [Accessed 17 December 2023].
- McKinney CJ, Kennedy S, Gower M, Todd Tyler. *No recourse to public funds*. House of Commons Library; 2023. CBP-9790.pdf (parliament.uk). [Accessed 17 December 2023].
- Pinter I, Compton S, Parhar R, Majid H. *A lifeline for all: children and families with No recourse to public funds*. London: The Children's Society; 2020. <https://www.childrenssociety.org.uk/information/professionals/resources/lifeline-for-all>. [Accessed 17 December 2023].
- World Health Organization (WHO). *Coronavirus disease (COVID-19) Pandemic* (webpage). <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>; [accessed 17 December 2023].
- Weller SJ, Crosby LJ, Turnbull ER, Burns R, Miller A, Jones L. The negative health effects of hostile environment policies on migrants: a cross-sectional service evaluation of humanitarian healthcare provision in the UK. *Wellcome Open Res* 2019;4:109. <https://doi.org/10.12688/wellcomeopenres.15358.1>.
- McKeown M, Dropkin G. Migrant health charges: a scandal amidst the crisis. *J Psychiatr Ment Health Nurs* 2021;28:118–20. <https://doi.org/10.1111/jpm.12647>.
- Van Hout MC, Bigland C, Marsden A, Bangura A, Ngcobo F, Masiya Mponela L, et al. Precarious migrants and COVID-19 responses: leave no one behind. *Publ Health* 2022;207:e1–2. <https://doi.org/10.1016/j.puhe.2022.03.007>.
- Dickson E, Rosen R. *Postponing migrant destitution: why we need to call for more than a suspension of no recourse to public funds, Postponing migrant destitution? Why we need to call for more than a suspension of No Recourse to Public Funds | Discover Society*. 2020. [Accessed 17 December 2023].
- Dickson E, Jolly A, Morgan B, Qureshi F, Sojka B, Stamp D. *Local authority responses to people with no recourse to public funds (NRPF) during the pandemic*. 2020. <https://pilc.org.uk/wp-content/uploads/2021/07/Research-report-LocalauthorityresponsestopeoplewithNRPFduringthepandemic.pdf>. [Accessed 17 December 2023].
- Evans M. *Abusing or misusing the right of free movement? The UK's policy towards EU nationals sleeping rough*. In: Mantu S, Minderhoud P, Guild E, editors. *EU citizenship and free movement rights: taking supranational citizenship seriously*. Leiden: Nijhoff; 2020.
- Morgan B. What fresh hell? UK policies targeting homeless migrants for deportation after Brexit and Covid-19. *Crit Soc Pol* 2022;42:150–9. <https://doi.org/10.1177/02610183211015621>.
- Waterman L, Pillay M, Katona C. The mass release of migrants from UK immigration detention during the COVID-19 pandemic: what can be learned? *BJ Psychiatric Bulletin* 2022;46:261–6. <https://doi.org/10.1192/bjb.2021.110>.
- Rousseau C, Frounfelker RL. Mental health needs and services for migrants: an overview for primary care providers. *J Trav Med* 2019;26:tay150. <https://doi.org/10.1093/jtm/tay150>.
- European Centre for Disease Control (ECDC). *Public health guidance on screening and vaccination for infectious diseases in newly arrived migrants within the EU/EEA*. 2018. <https://www.ecdc.europa.eu/sites/portal/files/documents/Public%20health%20guidance%20on%20screening%20and%20vaccination%20of%20migrants%20in%20the%20EU%20EEA.pdf>. [Accessed 17 December 2023].
- Shi M, Stey A, Tatebe LC. Recognizing and breaking the cycle of trauma and violence among resettled refugees. *Curr Trauma Rep* 2021;7:83–91. <https://doi.org/10.1007/s40719-021-00217-x>.
- World Health Organization (WHO). *Migrants and refugees at higher risk of developing ill health than host populations, reveals first-ever WHO report on the health of displaced people in Europe*. 2019. <http://www.euro.who.int/en/mediacentre/sections/press-releases/2019/migrants-and-refugees-at-higher-risk-of-developing-ill-health-than-host-populations-reveals-first-ever-who-report-on-the-health-of-displaced-people-in-europe>. [Accessed 17 December 2023].
- Hayward SE, Deal A, Cheng C, Crawshaw A, Orcutt M, Vandrevalla TF, et al, ESCMID Study Group for Infections in Travellers and Migrants (ESGITM). Clinical outcomes and risk factors for COVID-19 among migrant populations in high-income countries: a systematic review. *J Migr Health* 2021;3:100041. <https://doi.org/10.1016/j.jmh.2021.100041>.
- Nezafat Maldonado BM, Collins J, Blundell HJ, Singh L. Engaging the vulnerable: a rapid review of public health communication aimed at migrants during the COVID-19 pandemic in Europe. *J Migr Health* 2020;1:100004. <https://doi.org/10.1016/j.jmh.2020.100004>.
- Nazroo J, Murray K, Taylor H, Bécares L, Field Y, Rolston Y. *Rapid evidence review: inequalities in relation to covid-19 and their effects on London*. Greater London Authority; 2020. <https://data.london.gov.uk/dataset/rapid-evidence-r>. [Accessed 17 December 2023].
- Pollard T, Howard N. Mental healthcare for asylum-seekers and refugees residing in the United Kingdom: a scoping review of policies, barriers, and enablers. *Int J Ment Health Syst* 2021;15:60. <https://doi.org/10.1186/s13033-021-00473-z>.
- United Nations High Commissioner for Refugees (UNHCR). *The rights and health of refugees, migrants and stateless must be protected in COVID-19 response*. 2020. Joint press release from OHCHR, IOM, UNHCR and WHO, www.unhcr.org/ie/news/news-releases/rights-and-health-refugees-migrants-and-stateless-must-be-protected-covid-19. [Accessed 17 December 2023].
- International Commission of Jurists. *The impact of COVID-19 related measures on human rights of migrants and refugees in the EU: briefing paper*. 2020. <https://>

- www.icj.org/wp-content/uploads/2020/06/Covid19-impact-migrants-Europe-Brief-2020-ENG.pdf. [Accessed 17 December 2023].
29. United Nations High Commissioner for Refugees (UNHCR). *COVID-19 Preparedness and Response*. 2020. https://reporting.unhcr.org/sites/default/files/09062020_UNHCR%20Global%20COVID-19%20Emergency%20Response_0.pdf. [Accessed 17 December 2023].
 30. United Nations High Commissioner for Refugees (UNHCR). *UNHCR warns stateless people risk being left behind in coronavirus response*. 2020. <https://www.unhcr.org/en-ie/news/press/2020/5/5eb95222ec/unhcr-warns-stateless-people-risk-behind-coronavirus-response.html>. [Accessed 17 December 2023].
 31. Public Health England (PHE). *Disparities and risk and outcomes in COVID-19*. 2020. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908434/Disparities_in_the_risk_and_outcomes_of_COVID_August_2020_update.pdf. [Accessed 17 December 2023].
 32. Public Health England (PHE). *Beyond the data: understanding the impact of COVID-19 on BAME communities*. 2020. https://assets.publishing.service.gov.uk/media/5ee761fce90e070435f5a9dd/COVID_stakeholder_engagement_synthesis_beyond_the_data.pdf. [Accessed 17 December 2023].
 33. Public Health England (PHE). *Covid 19 migrant health guide*. 2021. www.gov.uk/guidance/covid-19-migrant-health-guide. [Accessed 17 December 2023].
 34. Bulman M. Undocumented migrants dying of coronavirus because they're too afraid to seek help, MPs and charities warn. *Independent* 2020. Available at: <https://www.independent.co.uk/news/uk/homenews/coronavirus-undocumented-migrants-deaths-cases-nhs-matthancock-a9470581.html>. [Accessed 17 December 2023].
 35. Parker RF, Figures EL, Paddison CA, Matheson JI, Blane DN, Ford JA. Inequalities in general practice remote consultations: a systematic review. *BJGP Open* 2021;**5**. <https://doi.org/10.3399/BJGPO.2021.0040>. BJGPO.2021.0040.
 36. European Centre for Disease Prevention and Control. *COVID-19 clusters and outbreaks in occupational settings in the EU/EEA and the UK*. 2020. www.ecdc.europa.eu/en/publications-data/covid-19-clusters-and-outbreaks-occupational-settings-eueea-and-uk#:~:text=Five%20EU%2FEEA%20countries%20and,March%20and%20early%20July%202020. [Accessed 17 December 2023].
 37. Institute on Statelessness and Inclusion (ISI). *Impact Report 2020*. 2020. https://files.institutesi.org/Covid19_Stateless_Impact_Report.pdf. [Accessed 17 December 2023].
 38. Van Hout MC, Bigland C, Murray N. *Situation assessment of statelessness, health and COVID-19 in Europe*. 2020. www.statelessness.eu/sites/default/files/2021-04/ENS_Health_Situation_Assessment_Europe.pdf. [Accessed 17 December 2023].
 39. Van Lancker W, Parolin Z. COVID-19, school closures, and child poverty: a social crisis in the making. *Lancet Public Health* 2020;**5**:e243–4. [https://doi.org/10.1016/S2468-2667\(20\)30084-0](https://doi.org/10.1016/S2468-2667(20)30084-0).
 40. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;**8**:19–32. <https://doi.org/10.1080/136455703200119616>.
 41. Peters MD, Godfrey CM, Khalil H, McInerney P, Parker D, Soares CB. Guidance for conducting systematic scoping reviews. *Int J Evid Base Healthc* 2015;**13**: 141–6. <https://doi.org/10.1097/XEB.0000000000000050>.
 42. Daudt HM, van Mossel C, Scott SJ. Enhancing the scoping study methodology: a large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Med Res Methodol* 2013;**13**:48. <https://doi.org/10.1186/1471-2288-13-48>.
 43. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010;**5**:69. <https://doi.org/10.1186/1748-5908-5-69>.
 44. Colquhoun HL, Levac D, O'Brien KK, Straus S, Tricco AC, Perrier L, et al. Scoping reviews: time for clarity in definition, methods, and reporting. *J Clin Epidemiol* 2014;**67**:1291–4. <https://doi.org/10.1016/j.jclinepi.2014.03.013>.
 45. Westphal KK, Regoeci W, Masotya M, Vazquez-Westphal B, Lounsbury K, McDavid L, et al. From Arksey and O'Malley and Beyond: customizations to enhance a team-based, mixed approach to scoping review methodology. *MethodsX* 2021;**8**:101375. <https://doi.org/10.1016/j.mex.2021.101375>.
 46. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;**372**:n71. <https://doi.org/10.1136/bmj.n71>.
 47. Follis L, Follis K, Burns N. Healthcare (im)mobilities and the Covid-19 pandemic: Notes on returning to the field. *Int J Cult Stud* 2023. <https://doi.org/10.1177/13678779231173707>.
 48. Essex R, Riaz A, Casalotti S, Worthing K, Issa R, Skinner J, et al. A decade of the hostile environment and its impact on health. *J R Soc Med* 2022;**115**:87–90. <https://doi.org/10.1177/01410768221078327>. 2022.
 49. McMullin C. Migrant integration services and coping with the digital divide: challenges and opportunities of the COVID-19 pandemic. *Voluntary Sector Review* 2021;**12**:129–36. <https://doi.org/10.1332/204080520X16076177287917>.
 50. Wise J. Covid-19: migrants face barriers accessing healthcare during the pandemic, report shows. *BMJ* 2021;**17**(374):n2296. <https://doi.org/10.1136/bmj.n2296>.
 51. Wood LCN, Devakumar D. Healthcare access for migrant children in England during the COVID-19 pandemic. *BMJ Paediatr Open* 2020;**4**:e000705. <https://doi.org/10.1136/bmjpo-2020-000705>.
 52. Waterman LZ. Cultural competence in vaccine rollout: migrants would face difficulties accessing covid-19 vaccines. *BMJ* 2021;**372**:n220. <https://doi.org/10.1136/bmj.n220>.
 53. Ciftci Y, Blane DN. Improving GP registration and access for migrant health. *Br J Gen Pract* 2022;**72**:56–7. <https://doi.org/10.3399/bjgp22X718301>.
 54. Germain S, Yong A. COVID-19 highlighting inequalities in access to healthcare in England: a case study of ethnic minority and migrant women. *Fem Leg Stud* 2020;**28**:301–10. <https://doi.org/10.1007/s10691-020-09437-z>.
 55. Crawshaw AF, Farah Y, Deal A, Rustage K, Hayward SE, Carter J, et al. Defining the determinants of vaccine uptake and undervaccination in migrant populations in Europe to improve routine and COVID-19 vaccine uptake: a systematic review. *Lancet Infect Dis* 2022;**22**:e254–66. [https://doi.org/10.1016/S1473-3099\(22\)00066-4](https://doi.org/10.1016/S1473-3099(22)00066-4).
 56. Rassa N, McCarthy M, Casalotti S, Zhang C, Wurie F, Brown C, et al. The impact of NHS charging regulations on healthcare access and utilisation among migrants in England: a systematic review. *BMC Publ Health* 2023;**23**:403. <https://doi.org/10.1186/s12889-023-15230-9>.
 57. Van Hout MC, Bigland C, Murray N. Scoping the impact of COVID-19 on the nexus of statelessness and health in Council of Europe member states. *J Migr Health* 2021;**4**:100053. <https://doi.org/10.1016/j.jmh.2021.100053>.
 58. European Centre for Disease Control. *Reducing COVID-19 transmission and strengthening vaccine uptake among migrant populations in the EU/EEA*. 2023. <https://www.ecdc.europa.eu/sites/default/files/documents/covid-19-reducing-transmission-and-strengthening-vaccine-uptake-in-migrants.pdf>. [Accessed 3 January 2024].
 59. Medact, Migrants Organise, New Economics Foundation. *Patients not passports: migrants' access to healthcare during the coronavirus crisis*. 2020. www.medact.org/wp-content/uploads/2020/06/Patients-Not-Passports-Migrants-Access-to-Healthcare-During-the-Coronavirus-Crisis.pdf. [Accessed 17 December 2023].
 60. Parry-Davies E. *A chance to feel safe*. 2020. <https://kanlungan.org.uk/wp-content/uploads/2020/07/A-chance-to-feel-safe-report.pdf>. [Accessed 17 December 2023].
 61. Doctors of the World. *A rapid needs assessment of excluded people in England during the 2020 COVID-19 pandemic*. 2020. www.doctorsoftheworld.org.uk/wp-content/uploads/2020/06/covid-full-rna-report.pdf. [Accessed 17 December 2023].
 62. Gardner Z. *Migrants deterred from healthcare during the COVID-19 pandemic*. The Joint Council for the Welfare of Immigrants; 2021. www.jcwi.org.uk/migrants-deterred-from-healthcare-in-the-covid19-pandemic. [Accessed 17 December 2023].
 63. Lessard-Phillips L, Fu L, Lindenmeyer A, Phillimore J, Dayoub R. *Migration and vulnerability during the pandemic: barriers to wellbeing*. 2021. www.doctorsoftheworld.org.uk/wp-content/uploads/2021/09/Barriers-to-wellbeing-09.21.pdf. [Accessed 17 December 2023].
 64. Berrou I, Hamilton K, Cook C, Armour C, Hughes S, Hancock J, et al. Leaving No one behind: interventions and outcomes of the COVID-19 vaccine maximising uptake programme. *Vaccines* 2022;**10**:840. <https://doi.org/10.3390/vaccines10060840>.
 65. Fu L, Lindenmeyer A, Phillimore J, Lessard-Phillips L. Vulnerable migrants' access to healthcare in the early stages of the COVID-19 pandemic in the UK. *Publ Health* 2022;**203**:36–42. <https://doi.org/10.1016/j.puhe.2021.12.008>.
 66. O'Donnell CA, Macdonald S, Browne S, Albanese A, Blane D, Ibbotson T, et al. Widening or narrowing inequalities? The equity implications of digital tools to support COVID-19 contact tracing: a qualitative study. *2022 Health Expect* 2022;**25**:2851–61. <https://doi.org/10.1111/hex.13593>.
 67. Stevens AJ, Ray AM, Thirunavukarasu A, Johnson E, Jones L, Miller A, et al. The experiences of socially vulnerable groups in England during the COVID-19 pandemic: a rapid health needs assessment. *Public Health Pract (Oxf)* 2021;**2**: 100192. <https://doi.org/10.1016/j.puhp.2021.100192>.
 68. Vilog RBT, Picoso IICM. Undocumented in the time of pandemic: exploring legal violence, healthcare, and human rights of irregular Filipino migrants in Italy and the UK. *Int J Human Rights Healthcare* 2021;**14**:209–22. <https://doi.org/10.1108/IJHRH-09-2020-0072>.
 69. Deal A, Hayward SE, Huda M, Knights F, Crawshaw AF, Carter J, et al., ESCMID Study Group for Infections in Travellers and Migrants (ESGITM). Strategies and action points to ensure equitable uptake of COVID-19 vaccinations: a national qualitative interview study to explore the views of undocumented migrants, asylum seekers, and refugees. 2021 *J Migr Health* 2021;**4**:100050. <https://doi.org/10.1016/j.jmh.2021.100050>.
 70. Gordon ACT, Crenstiel C, Mamluk L. Attitudes and experiences of asylum seekers and refugees to the COVID-19 vaccination: a qualitative study. *BJGP Open* 2023;**7**. <https://doi.org/10.3399/BJGPO.2023.0016>. BJGPO.2023.0016.
 71. Verity A, Tzortziou Brown V. Inclusion health patient perspectives on remote access to general practice: a qualitative study. *BJGP Open* 2023;**7**. <https://doi.org/10.3399/BJGPO.2023.0023>. BJGPO.2023.0023.
 72. Knights F, Carter J, Deal A, Crawshaw AF, Hayward SE, Jones L, et al. Impact of COVID-19 on migrants' access to primary care and implications for vaccine rollout: a national qualitative study. *Br J Gen Pract* 2021;**71**:e583–95. <https://doi.org/10.3399/BJGP.2021.0028>.
 73. Crawshaw AF, Kitoko LM, Nkembi SL, Lutumba LM, Hickey C, Deal A, et al. Co-designing a theory-informed, multi-component intervention to increase vaccine uptake with Congolese migrants: a qualitative, community-based participatory research study (LISOLO MALAMU). *Health Expect : an international journal of public participation in health care and health policy* 2023;**27**:e13884. <https://doi.org/10.1111/hex.13884>.

74. Carter J, Mehrotra A, Knights F, Deal A, Crawshaw AF, Farah Y, et al. "We don't routinely check vaccination background in adults": a national qualitative study of barriers and facilitators to vaccine delivery and uptake in adult migrants through UK primary care. *BMJ Open* 2022;**12**:e062894. <https://doi.org/10.1136/bmjopen-2022-062894>.
75. British Red Cross. *Offline and isolated the power of kindness the impact of digital exclusion on access to healthcare for people seeking asylum in England*. 2023. <https://www.redcross.org.uk/about-us/what-we-do/we-speak-up-for-change/how-digital-exclusion-impacts-access-to-healthcare-for-people-seeking-asylum-in-the-uk#:~:text=Our%20report%2C%20offline%20and%20isolated,healthcare%20access%20and%20social%20connection>. [Accessed 3 January 2024].
76. Health Watch. *Understanding the impact of COVID-19 on Turkish/Kurdish communities in Haringey*. 2020. www.healthwatchharingey.org.uk/report/2020-07-23/understanding-impact-covid-19-turkishkurdish-communities-haringey#:~:text=COVID-19%20has%20impacted%20many,and%20Kurdish%20people%20in%20Haringey. [Accessed 17 December 2023].
77. Zhang CX, Boukari Y, Pathak N, Mathur R, Katikireddi SV, Patel P, et al. Migrants' primary care utilisation before and during the COVID-19 pandemic in England: an interrupted time series analysis. *Lancet Reg Health Eur* 2022;**20**:100455. <https://doi.org/10.1016/j.lanepe.2022.100455>.
78. Murphy L, Broad J, Hopkinshaw B, Boutros S, Russell N, Firth A, et al. Healthcare access for children and families on the move and migrants. *BMJ Paediatr Open* 2020;**4**:e000588. <https://doi.org/10.1136/bmjpo-2019-000588>.
79. Chase E. Transitions, capabilities and wellbeing: how Afghan unaccompanied young people experience becoming "adult" in the UK and beyond. *J Ethnic Migrat Stud* 2020;**46**:439–56. <https://doi.org/10.1080/1369183X.2019.1584704>.
80. Kirby T. Evidence mounts on the disproportionate effect of COVID-19 on ethnic minorities. *Lancet Respir Med* 2020;**8**:547–8. [https://doi.org/10.1016/s2213-2600\(20\)30228-9](https://doi.org/10.1016/s2213-2600(20)30228-9).
81. United Nations Committee on Economic, Social and Cultural Rights (CESCR). *General comment No. 14: the right to the highest attainable standard of health (Art. 12 of the Covenant)*. 2000. www.refworld.org/pdfid/4538838d0.pdf. [Accessed 17 December 2023].
82. Worthing K, Seta P, Ouwehand I, Berlin A, Clinch M. Reluctance of general practice staff to register patients without documentation: a qualitative study in North East London. *Br J Gen Pract* 2023;**73**(729):e276–83. <https://doi.org/10.3399/BJGP.2022.0336>.
83. Watts G. COVID-19 and the digital divide in the UK. *The Lancet. Digital Health* 2020;**2**(8):e395–6. [https://doi.org/10.1016/S2589-7500\(20\)30169-2](https://doi.org/10.1016/S2589-7500(20)30169-2).
84. Papageorgiou V, Wharton-Smith A, Campos-Matos I, Ward H. Patient data-sharing for immigration enforcement: a qualitative study of healthcare providers in England. *BMJ Open* 2020;**10**:e033202. <https://doi.org/10.1136/bmjopen-2019-033202>.
85. Majeed A, Maile EJ, Bindman AB. The primary care response to COVID-19 in England's National Health Service. *J R Soc Med* 2020;**113**:208–10. <https://doi.org/10.1177/0141076820931452>.
86. Godin M. *Black and Asian groups more likely to die from coronavirus*. 2020. <https://time.com/5832807/coronavirus-race-analysis-uk/>. [Accessed 17 December 2023].
87. Cook T, Kursumovic E, Lennane S. Exclusive: Deaths of NHS staff from COVID-19 analysed. *Health Service J* 2020. <https://www.hsj.co.uk/exclusive-deaths-of-nhs-staff-from-covid-19-analysed/7027471>. [Accessed 17 December 2023].
88. Avaaz Online Petitions. *Coronavirus: end the hostile environment to fight the pandemic, coronavirus: end the hostile environment to fight the pandemic (avaaz.org)*. 2020. . [Accessed 17 December 2023].
89. Wallis E. *Vaccine amnesty in UK for undocumented migrants*. 2021. www.infomigrants.net/en/post/30161/vaccine-amnesty-in-uk-for-undocumented-migrants. [Accessed 17 December 2023].
90. Bell S, Clarke R, Mounier-Jack S, Walker JL, Paterson P. Parents' and guardians' views on the acceptability of a future COVID-19 vaccine: a multi-methods study in England. *Vaccine* 2020;**38**:7789–98. <https://doi.org/10.1016/j.vaccine.2020.10.027>.
91. Paul E, Steptoe A, Fancourt D. Attitudes towards vaccines and intention to vaccinate against COVID-19: implications for public health communications. *Lancet Reg Health Eur* 2021;**1**:100012. <https://doi.org/10.1016/j.lanepe.2020.100012>.
92. Razai MS, Kankam HKN, Majeed A, Esmail A, Williams DR. Mitigating ethnic disparities in covid-19 and beyond. *BMJ* 2021;**372**:m4921. <https://doi.org/10.1136/bmj.m4921>.
93. Razai MS, Osama T, McKechnie DGJ, Majeed A. Covid-19 vaccine hesitancy among ethnic minority groups. *BMJ* 2021;**372**:n513. <https://doi.org/10.1136/bmj.n513>.
94. Robertson E, Reeve KS, Niedzwiedz CL, Moore J, Blake M, Green M, et al. Predictors of COVID-19 vaccine hesitancy in the UK household longitudinal study. *Brain Behav Immun* 2021;**94**:41–50. <https://doi.org/10.1016/j.bbi.2021.03.008>.